

- a) transforming a plant cell with an expression cassette comprising a seed endosperm-preferred promoter operably linked to a polynucleotide encoding a high lysine and high methionine protein;
 - b) regenerating a transformed plant from the transformed cell; and
 - c) recovering transformed seeds having increased lysine and methionine compared to a corresponding non-transformed cereal plant seed.
58. The method of claim 57 wherein the plant seed is maize.
59. A seed from a cereal plant which has been transformed to express in the endosperm of the seed a high lysine and high methionine protein, wherein the seed endosperm comprises elevated levels of lysine and methionine compared to an endosperm of a corresponding non-transformed cereal plant seed.
60. The seed of claim 59 which is maize.
61. An expression cassette comprising an endosperm-preferred promoter operably linked to a nucleotide sequence encoding a high lysine and high methionine protein.
62. A vector comprising the expression cassette of claim 61.
63. A cereal plant comprising the expression cassette of claim 61.
64. The cereal plant of claim 63 which is maize.
65. A cell of the cereal plant of claim 63.
66. The cell of claim 65 which is maize.

67. A seed produced by the cereal plant of claim 63.
68. The seed of claim 67 which is maize.
69. The seed of claim 67 wherein the lysine and methionine content in the seed endosperm are each increased at least about 10% by weight compared to an endosperm of a corresponding non-transformed cereal plant seed.
70. The seed of claim 69 wherein the lysine and methionine content in the seed endosperm are each increased at least about 15% by weight compared to an endosperm of a corresponding non-transformed cereal plant seed.
71. The seed of claim 70 wherein the lysine and methionine content in the seed endosperm are each increased at least about 20% by weight compared to an endosperm of a corresponding non-transformed cereal plant seed.
72. A food or feed product comprising the seed of claim 59.
73. The food or feed product of claim 72 comprising meal, flour, grits, hominy, porridge or feed.
74. A method for increasing the nutritional value of a cereal plant seed comprising:
 - a) transforming a plant cell with an expression cassette comprising a seed endosperm-preferred promoter operably linked to a polynucleotide encoding a high lysine and high methionine protein, wherein the polynucleotide comprises barley alpha hordothionin, barley chymotrypsin inhibitor, soybean 2S albumin protein (ESA), pea albumin, the sulfur-rich 15KD maize protein of Seq ID No. 16,